LoB Target Architecture Requirements

Architectural Goals and Objectives

Goals:

? **Identification of LoB target architecture which:**

> ? **Uses the FEA taxonomy to describe the target architecture in consistent manner**

> ? **Provides sufficient detail within the architecture deliverables so that agencies can begin transition planning and analysis**

Today's Objective:

? **Define a minimum set of requirements for each set of deliverables.**

? **Provide a framework by which the first iteration of a high-level LoB target architecture can be developed.**

? **Understand that as the LoB process continues, additional levels of detail within the target architecture will be created.**

?**Three Major Sets of Deliverables**

Baseline Inventory
Target Architecture Business   Component Data   Technology
Transition Approach

Baseline Inventory

Baseline Inventory
Target Architecture
Business   Component
Data   Technology
Transition Approach

Baseline
Inventory Requirements

Requirements:

? **Each LoB is required to survey its membership for target architectures that might be used as straw men for beginning the architectural process.**

? **Each LoB is required to submit to the LoB PMO a brief document that states which agency target architectures were reviewed and why they were or were not used.**

Baseline Inventory
Target Architecture
Transition Approach

Target Business Architecture

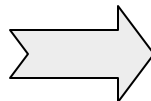| Baseline Inventory |
|---|
| **Target Architecture** |
| Business   Component |
| Data   Technology |
| **Transition Approach** |

Target Architecture Deliverables

?**The target architecture has four major layers, each of which has several sets of deliverables.**

Layers of the Architecture

Deliverables

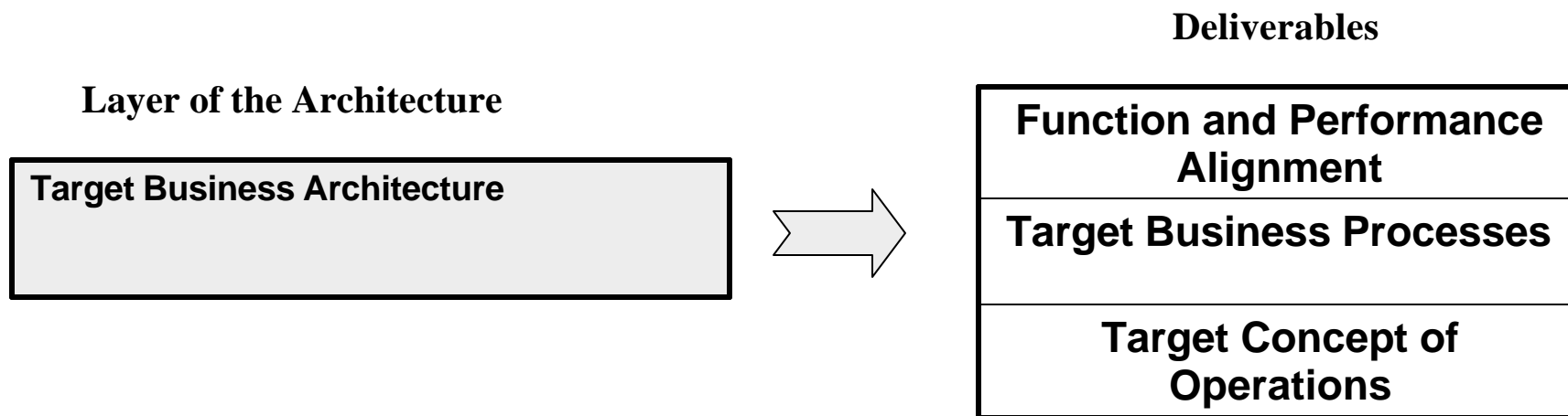| |
|---|
| **Baseline Inventory** |
| **Target Architecture** |
| **Transition Approach** |

Target Business Architecture: Describes the target functions, business processes, and performance objectives
Target Component Architecture: Describes the target components used to enable the target business functions and meet the LoB's performance objectives
Target Data Architecture: Describes the high-level data objects shared throughout the LoB
Target Technology Architecture: Describes the technology standards used to support the target components

Target Business Architecture

? **The target business architecture has three deliverables.**

Deliverables

Layer of the Architecture

Target Business Architecture

$\Rightarrow$

Function and Performance Alignment
Target Business Processes
Target Concept of Operations

Function and Performance Alignment

Architecture Layer	Deliverables
Target Business Architecture	Function and Performance Alignment
	Target Business Processes
	Target Concept of Operations

Requirements:

? **For each target BRM sub-function and its associated target process, the following information is required:**

  - ? **PRM Area - High-level area that is addressed**

  - ? **PRM Category - Grouping within the PRM area**

  - ? **LoB Goal - Specific LoB goal addressed**

  - ? **LoB Objective - Specific LoB objective addressed**

  - ? **BRM sub-function addressed with the target business process**

  - ? **Target business process associated to the sub-function**

  - ? **Rationale: Statement of why and how the target business process addressed the LoB objective**

Target Business Processes

Architecture Layer	Deliverables
Target Business Architecture	Function and Performance Alignment
	Target Business Processes
	Target Concept of Operations

Requirements:

? **The target business process should indicate which BRM sub-function it supports.**

? **The target business process will indicate if it is an internal (within LoB partners) or external process (outside of LoB partners).**

? **For each target business process, a set of activities will be sequenced, defined and described.**

? **Each target business process will describe the start, intermediate, and ending events that interact with it. Each event should have a high-level description.**

? **Each LoB target business processes will be defined in a document and presented in a graphical format describing the activities and events.**

Target Concept of Operations

Architecture Layer	Deliverables
Target Business Architecture	Function and Performance Alignment
	Target Business Processes
	Target Concept of Operations

Requirements:

? **The concept of operations (conops) is intended to describe (both in written form and graphically) the interactions of the major users of the target architecture and its associated common solutions.***

? **Each LoB is required to produce one conops for each common solution and one conops that describes the entire target architecture.**

*See the CIO Council *A Practical Guide to Federal Enterprise Architecture* for further information on the concept of operations.
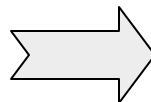
Target Component Architecture

? **The target component architecture has two deliverables.**

Architecture Layer

Target Component Architecture

Deliverables

SRM Mapping
Target Component Decomposition

SRM Mapping

Target Component Architecture	SRM Mapping
	Target Component Decomposition

Requirement:

? **Each LoB will describe the SRM components addressed through its target architecture and common solution. In cases where a component is new, it should be indicated as such and a rationale provided for why it was created.**

? **Each target component is also required to identify its associated target business process.**

? **The LoB should provide a rationale that describes why the target business process was aligned to a particular target component.**

Target Component Decomposition

Architecture Layer

Target Component Architecture

Deliverables

SRM Mapping
Target Component Decomposition

Requirements:

- ? **Each of the LoB's identified target components will include:**
    - ? **Each target component should identify its level of granularity as consistent with the Service Component Granularity matrix.* (Federated Business Component, Business Component System, Business Component, Distributed Component, Language Class)**
    - ? **The specific target business activities that are to be executed by the component, and the events (within the target business process) that the component might manage or interface with.**
    - ? **A listing and description of any sub-components (as described in the Notional Federal Enterprise Component) that are applicable to the target component. (i.e. workflow, mediator, messaging, etc).***
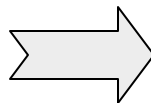
Note: Please refer to CIO Council's Service Component-Based Architectures
Version 2.0 document for further information regarding component definitions.

Target Data Architecture

?**The target data architecture has one deliverable.**

Architecture Layer

Deliverable

| Target Data Architecture | Data Object Definition |

Target Data Objects

Target Data Architecture	Data Object Definition

Requirements:

? **Define high-level set of target data objects. Data objects represent a set of ideas, abstractions or things that can be identified with explicit boundaries.**

? **For each target data object, describe the target business process(s) and activities where the data object is created, used, or deleted.**

? **For each target data object, describe the target components where the data object is created, used, or deleted.**

? **For all data objects, provide a high-level graphical representation of the relationships between the data objects, business processes, and components.**
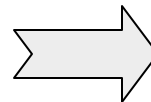
Target Technology Architecture

?**The target technology architecture has one deliverable.**

Architecture Layer

Target Technology Architecture

Deliverable

Target Technology Standards

Target Technology Standards

Architecture Layer	Deliverables
Target Technology Architecture	Target Technology Standards

Requirements:

? **Each target architecture is required to use the standards (third layer) of the FEA TRM.**

? **Two levels of analysis are required:**

  ? <u>Architecture wide</u>: **Standards that are used to enable the target architecture as a whole (include hosting, network, etc.); identification of common solutions that will make use of these standards; and associated rationale**

  ? <u>Component</u>: **Specific technology standards that are used to support specific components and an associated rationale (please identify components that are re-used across the target architecture)**
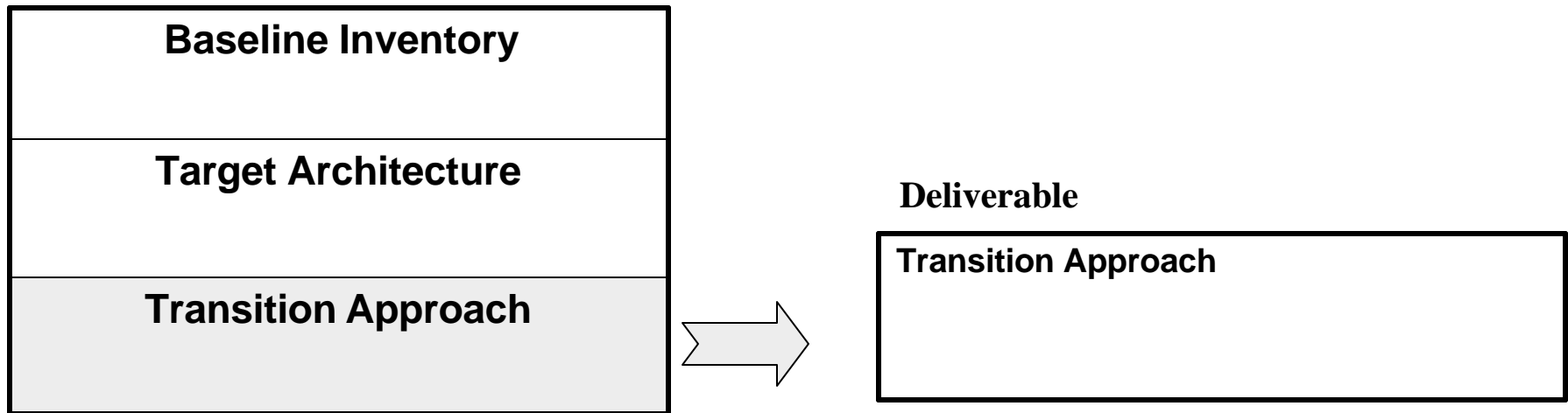
Transition Approach

Baseline Inventory
Target Architecture
Transition Approach

Transition Approach

?**The transition approach has one deliverable.**

Baseline Inventory
Target Architecture
Transition Approach

Deliverable

Transition Approach

Transition Approach

Requirements:

? **Conceptual approach to sustaining current operations during transition**

? **Conceptual approach to migrating existing technical assets**

? **Conceptual view of the management and organizational changes that might be required within the transitioning agency in regard to each common solution and the target architecture**

? **Conceptual approach to understanding the gaps between a transitioning agency's baseline environment and the target architecture of the LoB**

For further information regarding the transition approach, please refer to the CIO Council *Practical Guide*.

Target Architecture Deliverable Roadmap

Deliverable	Draft Date	Final Date
Baseline Inventory		5/17/04
Function and Performance Alignment	6/11/04	6/30/04
Target Business Processes	6/11/04	6/30/04
Target Concept of Operations	6/23/04	6/30/04
SRM Mapping	6/11/04	6/30/04
Target Component Decomposition	6/23/04	7/30/04
Target Data Object Definition	7/16/04	7/30/04
Target Technology Standards	7/16/04	7/30/04
Transition Approach	7/16/04	7/30/04